

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

FRAME-GRID CONSTRUCTION

DARK HEATER

*For Use in IF-Amplifier Stages of Color-
and Black-and-White TV Receivers*

ELECTRICAL CHARACTERISTICS

Bogey Values^a

Heater Voltage (AC or DC)	E_h	6.3	V
Heater Current	I_h	0.300	A
Direct Interelectrode Capacitances			
Without external shield			
Grid No.1 to plate.	C_{g1-p}	0.019 max	pF
Input: G1 to (K, G3 + 1S, G2, H) . .	C_i	8.5	pF
Output: P to (K, G3 + 1S, G2, H) . .	C_o	3.0	pF

For the following characteristics, see Conditions

Plate Resistance (Approx.)	r_p	180	Ω
Transconductance	g_m	16000	μmho
DC Plate Current	I_b	14	mA
DC Grid-No.2 Current	I_{c2}	3.4	mA
Cutoff DC Grid-No.1 Voltage.	$E_{c1}(\text{co})$	-3	V

Plate $\mu\text{A} = 100$

Conditions

Heater Voltage	E_h	Bogey Value	V
DC Plate Supply Voltage.	E_{bb}	125	V
Grid No.3.	-	Connected to cathode at socket	
DC Grid-No.2 Supply Voltage.	E_{cc2}	125	V
Cathode Resistor	R_k	56	Ω

MECHANICAL CHARACTERISTICS

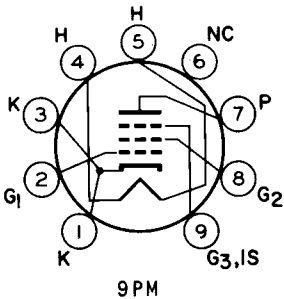
Operating Position	Any
Type of Cathode.	Coated Unipotential
Maximum Overall Length	2.187 in
Maximum Seated Length.	1.937 in
Length, Base Seat to Bulb Top.	1.469 to 1.656 in
Excluding tip	
Maximum Diameter	0.875 in
Dimensional Outline (JEDEC 6-2).	See <i>General Section</i>
Envelope	JEDEC T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC E9-1)



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TERMINAL DIAGRAM (Bottom View)

- Pin 1 - Cathode
- Pin 2 - Grid No.1
- Pin 3 - Cathode
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - No Internal Connection
- Pin 7 - Plate
- Pin 8 - Grid No.2
- Pin 9 - Grid No.3, Internal Shield



DESIGN-MAXIMUM RATINGS

For operation as a Class A₁ Amplifier Tube

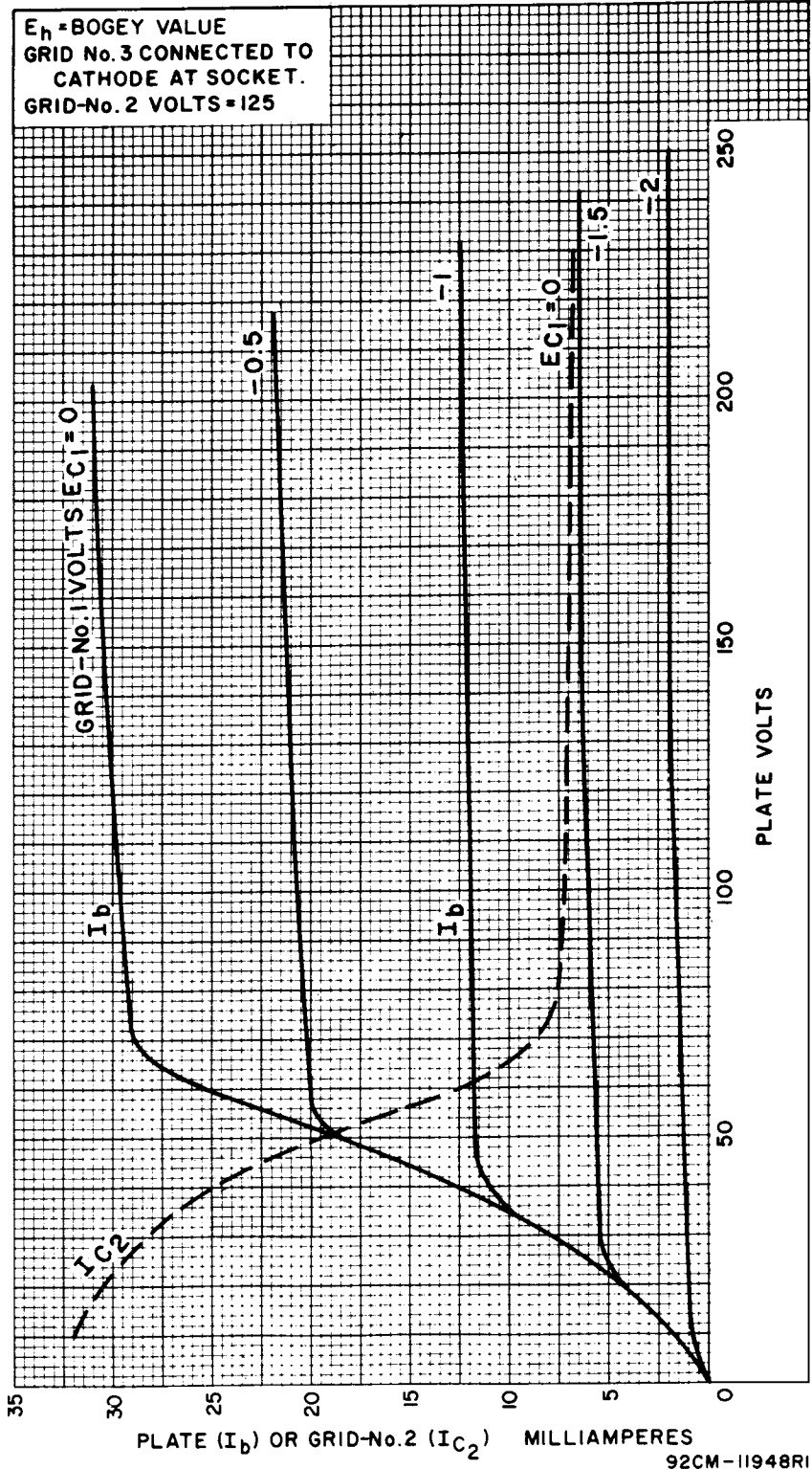
DC Plate Voltage	E _b	330	V
Positive DC Grid-No.3 (Suppressor-Grid) Voltage	E _{c3}	0	V
DC Grid-No.2 (Screen-Grid) Supply Voltage.	E _{cc2}	330	V
DC Grid-No.2 Voltage	E _{c2}	See Grid-No.2 Input Rating Chart	
at front of Receiving Tube Section			
DC Grid-No.1 (Control-Grid) Voltage Positive-bias value.	E _{c1}	0	V
Heater-Cathode Voltage Peak	e _{hkm}	±200	V
DC	E _{hk}	100	V
Heater Voltage (AC or DC).	E _h	5.7 to 6.9	V
Grid-No.2 Input For E _{c2} ≤ 165 V.	P _{g2}	0.7	W
For E _{c2} ≥ 165 V and ≤ 330 V.	-	See Grid-No.2 Input Rating Chart	
at front of Receiving Tube Section			
Plate Dissipation.	P _b	3.1	W

MAXIMUM CIRCUIT VALUES

Grid-No.1 Circuit Resistance	R _{g1} (ckt)	0.25	MΩ
For fixed-bias operation	-	1	MΩ
For cathode-bias operation	-		

^a Unless otherwise specified.

Typical Characteristics



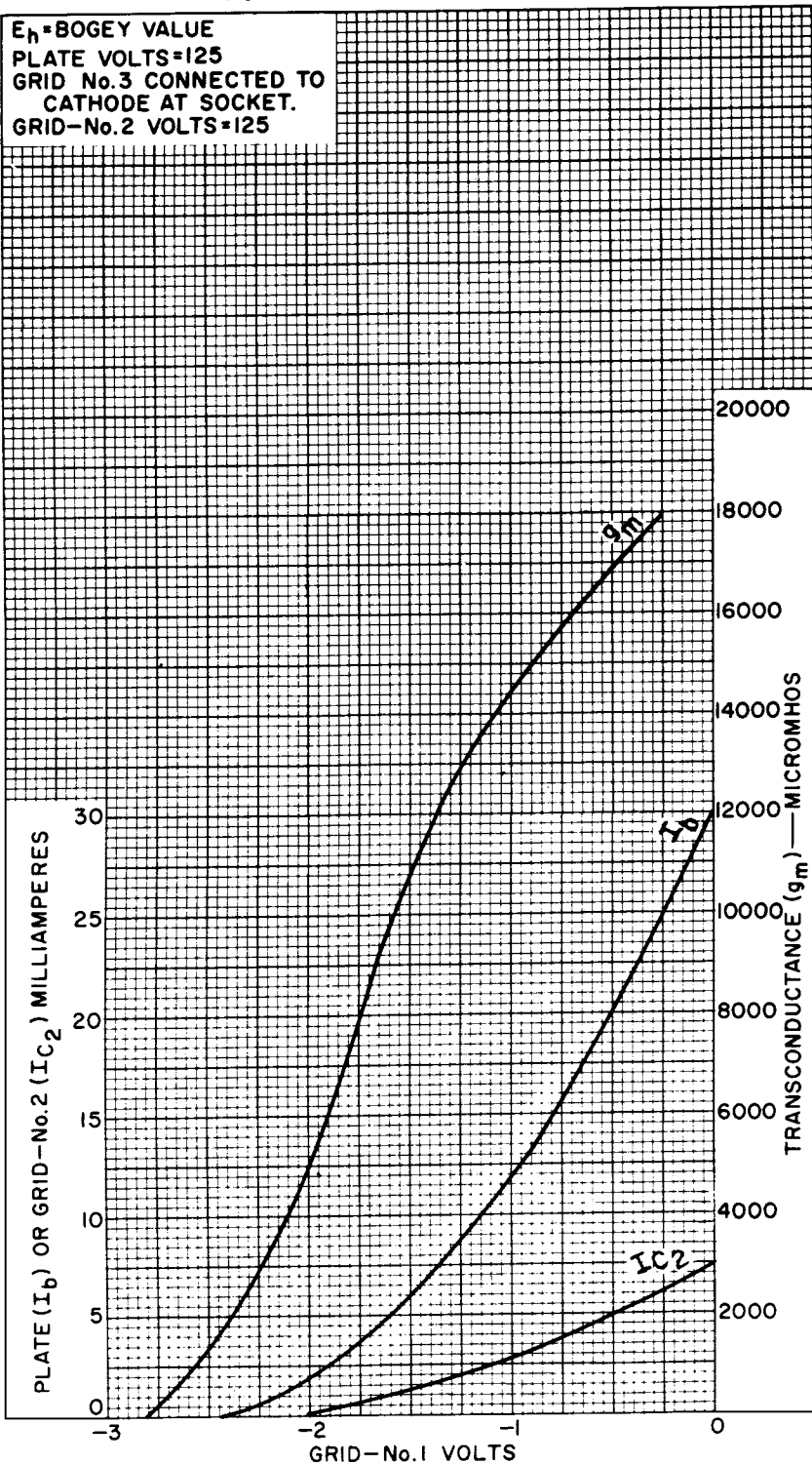
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Typical Characteristics

E_h = BOGEY VALUE
PLATE VOLTS = 125
GRID No. 3 CONNECTED TO
CATHODE AT SOCKET.
GRID-No. 2 VOLTS = 125



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